# Energy and Climate Change Directorate Energy Consents Unit

Scottish Government Riaghaltas na h-Alba gov.scot

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Mr Theo Philip 3R Energy Solutions Limited Lanark Auction Market Hyndford Road Lanark ML11 9AX

26 February 2020

Dear Mr Philip

CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 AND DEEMED PLANNING PERMISSION UNDER SECTION 57(2) OF THE TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 FOR THE CONSTRUCTION AND OPERATION OF THE REPOWERED AND EXTENDED HAGSHAW HILL WIND FARM WITHIN THE PLANNING AUTHORITY AREA OF SOUTH LANARKSHIRE COUNCIL

## **Application**

I refer to the application made on 12 December 2018 under section 36 of the Electricity Act 1989 ("the Electricity Act") made by Hagshaw Hill Repowering Limited, a company incorporated under the Companies Acts with company number SC603085 (a subsidiary of 3R Energy Solutions Ltd), and having its registered office at Lanark Auction Market, Hyndford Road, Lanark ML11 9AX for the construction and operation of the repowered and extended Hagshaw Hill Wind Farm, an electricity generating station comprising 14 wind turbines with a maximum blade tip height of 200 metres and battery storage facility ("the proposed Development").

The proposed Development is located at Hagshaw Hill, 3.2km to the west of Douglas in the South Lanarkshire Council area with a total generating capacity in excess of 50 Mega Watts (MW).

This letter contains the Scottish Ministers' decision to grant section 36 consent for the proposed Development as described at Annex 1.

### **Planning Permission**

In terms of section 57(2) of the Town and Country Planning (Scotland) Act 1997 the Scottish Ministers, may on granting consent under section 36 of the Electricity Act for the construction and operation of a generating station direct that planning permission be deemed to be granted in respect of that generating station and any ancillary development.

This letter contains the Scottish Ministers' direction that planning permission is deemed to be granted.

## Background

The existing Hagshaw Hill Wind Farm is operational and comprises 26 wind turbines at 55m height to tip, and associated infrastructure with a total generating capacity of 15.6MW. Planning permission was granted by the then Clydesdale District Council in February 1995 and it was constructed the same year to become Scotland's first commercial wind farm. It is this existing wind farm that is being repowered and extended south under this consent.

A further planning permission was granted consent by South Lanarkshire Council for an extension to the Hagshaw Hill Wind Farm in December 2006. The Hagshaw Hill Extension Wind Farm became operational in 2008 and comprises 20 wind turbines at 80m height to tip with a generating capacity of 26MW. The Hagshaw Hill Extension Wind Farm are in two groups: 9 wind turbines are located to the west of the proposed Development and 11 wind turbines are located to the east of the proposed Development. The Hagshaw Hill Extension Wind Farm's current consent allows it to continue to operate until at least 2033 and does not form part of this section 36 Application.

On 12 December 2018, the Company submitted an application to construct and operate the repowered and extended Hagshaw Hill Wind Farm. The application proposed 14 turbines with ground to blade tip height of up to 200 metres, and an installed capacity of up to 84MW together with an energy storage facility of up to 20MW (anticipated total output up to 20MWh).

The proposed Development comprises 7 turbines to be located on the existing wind farm site with the removal of the existing 26 turbines. The additional 7 turbines and energy storage facility are to be located south of the existing wind farm on moorland and agricultural land.

#### **Legislation**

Under Schedule 8 to the Electricity Act, and the Electricity (Applications for Consent) Regulations 1990 ("the Consents Regulations") made under the Electricity Act, the relevant Planning Authority is required to be notified in respect of a section 36 consent application. In accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ("the EIA Regulations") the Company submitted an Environmental Impact Assessment report ("the EIA report") in support of the application describing the proposed Development and giving an analysis of its environmental effects.

In addition, to comply with the EIA Regulations, Scottish Ministers are required to consult the Planning Authority, as well as Scottish Natural Heritage (SNH), the Scottish Environment Protection Agency (SEPA) and Historic Environment Scotland (HES) as well as other persons that are likely to be concerned by the proposed development by reason of their specific environmental responsibilities.

In accordance with requirements of both the Consents Regulations and the EIA Regulations, a notice of the proposed Development was published on the Company's website and advertised in local and national press. The application was also placed in the public domain, and the opportunity given for those wishing to make representations to do so. Notifications were sent to South Lanarkshire Council as the relevant Planning Authority as well as to SNH, SEPA and HES.

Scottish Ministers have had regard to the matters set out in Schedule 9 of the Electricity Act in respect of the desirability of preserving the natural beauty of the countryside, of conserving flora, fauna and geological and physiological features of special interest and of protecting sites, buildings and objects of architectural, historic, or archaeological interest. Scottish Ministers shall avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.

Scottish Ministers have given consideration to the extent to which the Company has demonstrated in the Application submitted that they have done what they reasonably can to mitigate any effect, which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites buildings or objects.

In accordance with section 36(5A) of the Electricity Act, before granting any section 36 consent Scottish Ministers are also required to:

- obtain SEPA advice on matters relating to protection of the water environment; and
- have regard to the purposes of Part 1 of the Water Environment and Water Services (Scotland) Act 2003.

SEPA's advice has been considered as required by section 36(5A) with due regard given to the purposes of Part 1 of the Water Environment and Water Services (Scotland) Act 2003. SEPA have no objection to the proposed Development. In their response to Scottish Ministers, they direct the Company to the Regulations section of the SEPA website for advice on regulatory requirements and good practice advice.

Scottish Ministers are satisfied that the EIA report has been produced in accordance with the EIA Regulations. Scottish Ministers have assessed the environmental impacts of the proposed Development and taken the Application, EIA report, representations, consultation responses including those from SNH, SEPA, HES and South Lanarkshire Council (the Planning Authority) into consideration in reaching their decision.

Scottish Ministers consider that there is sufficient information to allow Ministers to be satisfied that the Company has had regard to the desirability of preserving the natural beauty of the countryside, of conserving flora, fauna, and geological and physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic, or archaeological interest.

Scottish Ministers are satisfied that the Company has done what it reasonably can to mitigate any effect, which the proposals would have on the natural beauty of the countryside, or any such flora, fauna, features, sites, buildings or objects.

Scottish Ministers are satisfied that the Company has avoided so far as possible, causing injury to fisheries or to stock of fish in any waters.

Scottish Ministers have had regard to the requirements regarding publicity and consultation laid down in the Consents Regulations and EIA Regulations and are satisfied the general public as well as statutory and other consultees have been afforded the opportunity to consider and make representation on the proposed Development.

#### **Conservation of Habitats and Species Regulations**

The Conservation of Habitats and Species Regulations 2017 ("the Habitats Regulations") require Scottish Ministers to consider whether the proposed Development would be likely to have a significant effect on a European site, as defined in the Habitats Regulations, and if the development is directly connected with or necessary to the management of the European site. The proposed Development lies approximately 2.3km north east of the Muirkirk and North Lowther Uplands Special Protection Area (SPA). Consequently, Scottish Ministers are required to consider the effect of the proposed Development on the SPA by carrying out a Habitats Regulations Appraisal (HRA).

The HRA concluded that the proposal is likely to have a significant effect on the qualifying interests of the SPA and therefore Scottish Government has undertaken an appropriate assessment in view of the site's conservation objectives for its qualifying interests.

Scottish Ministers appropriate assessment concluded, following advice from SNH, and in view of the conservation objectives of the SPA being met, the proposed Development alone and in combination with other projects or proposals that could have impacts on the SPA, will not have an adverse effect on SPA's integrity. Therefore, no mitigation measures are required.

### **Public Local Inquiry ("PLI")**

In accordance with paragraph 2(2) of Schedule 8 of the Electricity Act 1989, where the relevant Planning Authority objects to an application and the objection is not withdrawn the Scottish Ministers shall cause a PLI to be held. South Lanarkshire Council did not object to the application. Ministers are satisfied there is sufficient information to be able to make an informed decision on the application and that it would not be appropriate to hold a PLI.

# **Consultation Responses**

**South Lanarkshire Council** did not object to the application. The Planning Authority assessed the application against the Development Plan and the appropriate policies including matters in relation to landscape and visual effects. Their assessment reviewed SNH comments in relation to turbines 10, 11 and 14 dominating the horizon. The Planning Authority considered that these turbines should not be viewed in isolation but should be viewed in relation to the other 11 turbines proposed for this application as well as the existing and consented wind farm developments in the area. Therefore, the Planning Authority considered that whilst the turbines may seem dominating at 200m, they do not appear incongruous within a turbine landscape of this nature as they are within the centre of the turbine landscape rather than being outliers that cannot be read as part of a larger wind farm. The Planning Authority considered the reduction of these 3 turbines by 20m in an open landscape may have limited visual affect, it would bring uniformity to these turbines in line with the other proposed turbines that are located below the summit and ridgeline of the Rolling Moorland with The Planning Authority recommend Wind Farm Landscape Character Type. consideration should be given by the Scottish Government to the reduction in height of turbines 10, 11 and 14.

The effects of the proposed Development on the Douglas Valley Special Landscape Area (SLA) were also assessed by the Planning Authority and they considered that the integrity of the SLA's character is not compromised by the proposed Development and the special natural of the Douglas Valley is maintained.

Subject to the imposition of conditions, the Planning Authority consider the proposed repowering of the existing wind farm with 14 turbines, although at a much taller scale and covering an additional area of ground, is acceptable. The Planning Authority state the proposed Development is not considered to have any significant, adverse impact within the surrounding area and is considered to accord with National Policy and the relevant provisions of the Development Plan. The Planning Authority also noted that Coalburn Community Council submitted a response direct to South Lanarkshire Council, which fully support this project.

**Scottish Environmental Protection Agency ("SEPA")** did not object to the application subject to planning conditions for the submission of a Construction Environmental Management Plan and a detailed Drainage Strategy. SEPA considered the Flood Risk Assessment and have no objections on flood risk grounds though advice relating to flood risk is provided.

SEPA consider that the impacts of the water environment have been satisfied at this application stage and reference is made to the appropriate licences required for the development stage. SEPA also refer to best practice methods on the storage and reuse of peat.

Scottish Natural Heritage ("SNH") advised on matters relating to ecology, landscape and protected species. SNH did not object to the application but highlighted the potential range of mitigation measures which will require to be incorporated into a species protection plan should pre-construction surveys confirm the presence of bat roosts. They also recommend that turbines should be located so that no part of their structure or blades falls within 50 metres of features of value for bat activity. Otherwise, if this 50-metre buffer is not achieved then they recommend blade feathering at turbines less than 50 metres to reduce the potential for bat casualties. With regards to landscape and visual impacts SNH consider that the scale of the turbines are out of scale with the landscape and result in a number of adverse effects. SNH recommend that thought should be given to modification of the proposals by relocating or removing turbines 10, 11 and 14, reducing the height of the remaining turbines to between 150m and 180m and therefore reducing the cumulative effects on the Douglas Valley Special Landscape Area. SNH also considered the impacts of aviation lighting requirements and recognised that only 7 of the 14 turbines would require visible aviation lighting.

**Historic Environmental Scotland ("HES")** concluded that the proposal does not raise issues of national significance for heritage assets within the remit of HES and therefore do not object to the application.

**East Ayrshire Council** is a neighbouring planning authority and expressed concerns about the overall scale of the proposed turbines and the appropriateness of this height of turbine within the landscape. They suggested that consideration be given to reducing the height of the overall scheme to a scale more appropriate to the landscape.

Marine Scotland Science does not object to the proposed Development and recommend proposed water quality and fish monitoring programme. It recommends the Company establish a robust integrated water quality and fish monitoring programme to ensure the water quality does not deteriorate throughout the development, as required by the Water Framework Directive, and to protect fish populations of high national conservation importance. Scottish Ministers have attached conditions within Annex 2, which gives effect to Marine Scotland Science's recommendation.

**Transport Scotland** has no objection based on the information submitted and request conditions are attached in relation to proposed works to M74 Junction 11, minimising interference with the safety and free flow of traffic on the trunk road, wheel washing facilities and the abnormal load route. Scottish Ministers have attached conditions within Annex 2, which gives effect to Transport Scotland's recommendation.

**Scottish Forestry** are generally supportive of the proposed development though they noted that a small amount of tree removal would occur. Scottish Forestry engaged with the applicant and the Planning Authority, and a proposal for compensatory planting has been agreed.

Given the limited scale of tree removal and agreed compensatory planting proposal this matter can be addressed out with the requirement for a condition.

**Glasgow Prestwick Airport** have no objection and are satisfied that the proposed Development will have no material impact on the provision of air traffic service.

NATS (En-Route) plc has objected to the proposed development, as its assessment is that the development will cause an adverse impact to the Lowther Hill and Cumbernauld radars and associated air traffic operations of NATS (En-Route) plc ("NERL") without suitable mitigation. An agreement has been entered into between NERL and Hagshaw Hill Repowering Limited dated 31 January 2020 for the agreement of suitable planning conditions and the implementation of an identified and defined mitigation solution in relation to the development that will be implemented under agreement. In summary, such mitigation solution will require works to be carried out to NERL's infrastructure and comprises a modification to the radar system. NERL is therefore prepared to withdraw its objection to the application subject to the imposition of agreed conditions.

Glasgow Airport Limited (GAL) has objected to the proposed development, as its assessment is that the development will cause an adverse impact to airport's Primary Surveillance Radar and Associated air traffic operations without suitable mitigation. An agreement has been entered into between GAL and the Developer dated 19 August 2019 for the agreement of suitable planning conditions and the implementation of identified and defined mitigation solution in relation to the development that will be implemented under agreement. GAL continue to maintain their aerodrome safeguarding objection to the proposal unless the agreed conditions are applied to any planning permission.

**Civil Aviation Authority (CAA)** current requirements for lighting onshore wind turbines as specified in the Air Navigation Order (2016) Article 222, which requires that all obstacles over 150m above ground level are fitted with medium intensity steady red lights positioned as close as possible to the top of the obstacle. CAA indicated that they are content with the draft proposed lighting plan for this development and highlighted that they require the final lighting plan to be approved prior to construction.

**Douglas Community Council** did not respond to the consultation.

The following consultees provided no objection subject to comments/no comment and/or conditions which are set out in Annex 2: **BT, Defence Infrastructure Organisation; Scottish Water; Scotways; and The Coal Authority.** 

The following consultees did not respond to the consultation: **Fisheries Management Scotland, Joint Radio Company, and RSPB.** 

#### **Representations**

The Scottish Ministers received no public representations, either in support of, or objecting to the application.

### **Scottish Government Policy Context**

## Climate Change (Scotland) Act 2009

The Climate Change (Scotland) Act 2009, passed by the Scottish Parliament in 2009, sets out the targets for reducing greenhouse gas emissions as an interim 42% reduction target for 2020 and an 80% reduction target for 2050. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 (2019 Act) received Royal Assent on 31 October 2019 and sets a target for Scotland to be carbon-neutral, meaning net-zero CO<sub>2</sub>, by 2045 at the latest. Additionally the 2019 Act sets out two interim targets to reduce emissions by 75% by 2030 and by 90% by 2040.

# **Scottish Energy Strategy and Onshore Wind Policy Statement**

Scottish Energy Strategy (SES) and Onshore Wind Policy Statement (OWPS) were published in December 2017. SES sets out a vision for the future energy system in Scotland through to 2050 and sets out the priorities for an integrated system-wide approach that considers the use and supply of energy for heat, power and transport. The strategy provides a long-term vision to guide energy policy decisions to tackle the challenges of decarbonising heat and transport in order to meet Scotland's long-term energy and climate change targets. The OWPS reaffirms the vital role for onshore wind in meeting Scotland's energy targets. The statement sets out the Scotlish Government's position for the ongoing need for more onshore wind development and capacity in locations across Scotland where it can be accommodated in appropriate locations.

#### **National Planning Framework 3**

National Planning Framework 3 (NPF3) June 2014 sets out the long term vision for the development of Scotland and is the spatial expression of the Scotlish Government's Economic Strategy, that has a focus on supporting sustainable economic growth which respects the quality of the environment, place and life in Scotland and the transition to a low carbon economy. The framework sets out strategic outcomes aimed at supporting the vision – a successful, sustainable place, a low carbon place, a natural, resilient place and a connected place.

#### **Scottish Planning Policy**

The Scottish Government supports wind energy development in appropriate locations. Scottish Planning Policy (SPP) 2014 aligns itself with NPF3 and one of its policy principles states that there will be a presumption in favour of development that contributes to sustainable development.

SPP sets out that polices and decisions should be guided by certain principles giving due weight to net economic benefit; the contribution to renewable energy targets; supporting delivery of infrastructure, including energy, and; protecting natural heritage, including landscape and the wider environment. SPP also states that the planning system should support the development of a diverse range of electricity generation from renewable energy technologies – including the expansion of renewable energy generation capacity.

The majority of the proposed Development is located within an already established area for wind farm development. Scottish Ministers acknowledge that the proposed Development would result in some significant landscape and visual impacts, which are considered acceptable in the context of the benefits that the proposed Development will bring in terms of net economic benefit, contributing to renewable energy and climate change targets, while protecting the historical and natural environment. On balance, it is considered that the proposed Development contributes to sustainable development.

## **Development Plan Status**

The Development Plan covering the application site comprises Glasgow and Clyde Valley Strategic Development Plan 2017 (GCVSDP) Onshore Wind Spatial framework (paragraphs 7.8 and 7.9). The Onshore Wind Spatial Framework is aligned to increasing energy efficiency and reducing carbon emissions. Policy 10 Onshore Energy requires proposals to accord with local development plans.

South Lanarkshire Local Development Plan (SLLDP) was adopted on 29 June 2015 and contains the policies against which the Planning Authority assessed the proposal. Approved Supplementary Guidance documents 1, 2, 3, 9 and 10, support the policies in the SLLDP and were assessed by the Planning Authority.

On 29 May 2018, South Lanarkshire Planning Committee approved the Proposed South Lanarkshire Local Development Plan 2 (SLLDP2) and Supporting Planning Guidance on Renewable Energy, which is a material consideration in the determination of this application. The relevant policies were assessed by the Planning Authority, who concluded that provided the proposed Development is carried out in accordance with the terms of the application and the accompanying EIA report, including all mitigation and monitoring measures stated in it, and subject to proposed conditions being included, then it is not considered to have any significant, adverse impact within the surrounding area and is considered to accord with national policy and the relevant provisions of the Development Plan.

#### **The Scottish Ministers Considerations**

## **Main Determining Issues**

Having considered the Application, the EIA report, responses from consultees and Scottish Government policies, Ministers consider that the main determining issues are:

 the environmental impacts of the proposed Development, in particular the landscape and visual impacts;

- the estimated economic and renewable energy benefits which the proposed Development is likely to bring: and
- the extent to which the proposed Development accords with and is supported by Scottish Government policies.

# Assessment of the Determining Issues

## **Landscape and Visual Impacts**

In consideration of the proposed Development, Scottish Ministers have considered the comments made by consultees South Lanarkshire Council, SNH and East Ayrshire Council's recommending that thought should be given to modification or redesign of the proposals by removing or reducing the height of the turbines, in particular turbines 10, 11 and 14, therefore reducing the cumulative effects on the Douglas Valley Special Landscape Area (SLA).

The Landscape and Visual Impact Assessment (LVIA) is presented within the EIA report. It identifies any likely significant landscape and visual effects arising as a result of the proposed Development. The LVIA findings conclude that the proposed Development would result in some significant landscape and visual effects, which is inevitable given the nature of this proposed Development. Taking into account consultation responses, Scottish Ministers therefore considered the concerns raised.

Scottish Ministers have undertaken a site visit and reviewed the LVIA together with the consultation responses. In relation to SNH consultation response, the Company responded clarifying the benefits of the proposed Development in comparison with 200m height turbines against 180MW height turbines and this has also been taken in to account in the determination.

Scottish Ministers consider the landscape context of this proposed Development. Following the construction of the existing Hagshaw Hill Wind Farm in 1995, there have been other wind farm developments constructed in the area and further wind farm developments have received consent and are expected to be constructed in the near future. The cluster of wind farm developments which the proposed Development is located within includes: Hagshaw Hill; (operational); Hagshaw Hill Extension (operational); Galawhistle (operational); Cumberhead (consented); Nutberry (operational); Dalquhandy (consented); Douglas West (consented); and Douglas West Ext (application). The majority of the proposed Development (11 of the 14 turbines) are located within Rolling Moorland with Wind Farm Landscape Character Type (LCT). The other 3 turbines are located within the northern fringe of the Rolling Moorland LCT and due to the rising topography of the landscape; they have a backdrop onto the Rolling Moorland with Wind Farm LCT.

With regard to SNH comments on adverse landscape and visual effects, Scottish Ministers have considered the LVIA, in particular viewpoints 1; 2; 4; 5; and 9, where the different scenarios in height reduction can be demonstrated. Scottish Ministers consider there would be little difference in terms of landscape and visual effects between 180m and 200m turbine heights and it is recognised that adjacent turbines in this cluster are lower in height, and the complete consistency of turbine heights within this cluster is difficult to achieve due to evolving technology.

It is also noted the Dalquhandy Wind Farm proposal, located in the cluster, secured planning permission from South Lanarkshire Council to increase 11 of their 15 turbines from 131m to 149.9m.

Scottish Ministers therefore, on balance, consider that reducing the height of all of the turbines, or removing wind turbines 10; 11; and 14 would not achieve any noticeable reduction in visual impact and that these turbines are absorbed by the wider cluster of wind farms. Scottish Ministers note that excluding those turbines which are situated on the higher ground where wind resource is greatest would reduce the renewable energy output of the proposed Development and that any benefits gained by a reduction in the numbers or size of any of the wind turbines will not, on balance, justify the reduction in the capacity of renewable energy.

SNH also provided comments on the cumulative landscape effects on the Douglas Valley Special Landscape Area (SLA). Taking into account the site visit, LVIA and the consultation response from the Planning Authority, Scottish Ministers concur with the Planning Authority that the integrity of the SLA's character is not compromised by the proposed Development and the special nature of the valley is maintained.

Due to the height of the proposed turbines, visible aviation lighting may be required and it is recognised that there is likely to be visual effects as a result. The assessment of visible turbine lighting is set out in the LVIA, which identifies that the visible lighting would be screened by landform and topography from much of the surrounding area and in generally in areas where night-time lighting is a familiar element of the landscape. It is recognised that there would be potential for significant effects on the character of the landscape and for some receptors in the immediate vicinity of the proposed Development during low light levels.

Scottish Ministers have taken into account that the Civil Aviation Authority's (CAA) review of the proposed aviation obstruction lighting plan and are satisfied that the plan is in accordance with the proposed CAA policy direction, which aims to reduce the visual impact of obstruction lighting on UK onshore wind turbine developments. In order to ensure that the aviation lighting plan complies with current policies, an aviation lighting condition has been secured to this consent as set out in Annex 2.

Scottish Ministers acknowledge that the proposed Development would result in some significant landscape and visual impacts and that it is located within an established area for wind farm development. Given the Scottish Government policy context, the economics benefits and contribution to renewable energy targets that the proposed Development would bring, on balance the Scottish Ministers consider that the proposed 200m turbines in this wind farm landscape are acceptable, and there in this case there is no justifiable basis for seeking a reduction in turbine height or removal of turbines 10, 11 and 14.

#### **Economic Benefits**

The transition to a low carbon economy is an opportunity for Scotland to take advantage of our natural resources to grow low carbon industries and create jobs.

The Company sets out in the EIA report that the proposed Development will result in a substantial investment in South Lanarkshire and Scotland, and is expected to generate economic impacts during the development and construction phase.

The proposed Development would generate up to £17.1 million and 152 job years of employment in South Lanarkshire and £46.1 million and 423 job years in Scotland (including South Lanarkshire). During each year of operation of the proposed Development, it is estimated it would generate that £0.7m million and 6 jobs in South Lanarkshire and £1.1 million and 9 jobs in Scotland (including South Lanarkshire).

Whilst the overall net economic benefits are estimations of the effects of the proposed Development, Ministers are satisfied the proposed Development has the potential for significant positive net economic benefits both for the local community, South Lanarkshire and Scotland.

# Scottish Government policy, renewable energy targets and carbon payback

SPP advises that proposals for energy infrastructure developments should always take account of spatial frameworks for wind farms where these are relevant. SPP identifies a number of considerations to be taken into account when determining energy infrastructure developments (set out at SPP paragraph 169) including but not limited to, landscape and visual, cumulative impact, net economic impact, and contribution to the renewable energy generation targets.

The Planning Authority set out in their response that the proposed Development falls within Group 2 and Group 3 areas of the spatial framework for South Lanarkshire Council, and following an assessment they consider that subject to conditions and mitigation measures being implemented, the proposed Development complies with the spatial framework and the considerations as set out in SPP.

The renewable energy produced and the contribution the proposed Development can make to targets and carbon payback requires to be taken into account in the decision.

The proposed Development makes a significant contribution towards meeting greenhouse gas emission and renewable electricity targets with a generating capacity of approximately 84 MW from the wind farm, and 20 MW from the energy storage facility, which is estimated to provide up to 20MWh of storage capacity per year.

Based on a calculated site-specific capacity factor presented in the EIA report, the annual indicative total power output for the proposed Development would be around 237.7 GW hours per year, indicating the proposed Development would generate enough electricity to power over 60,940 average UK households.

The deployment of this amount of renewable energy produced in Scotland is entirely consistent with the Scottish Government's policy on the promotion of renewable energy and its target for the equivalent of 100% of all renewable energy to come from Renewables by 2030.

The potential savings in CO<sub>2</sub> emissions due to the proposed Development replacing other electricity sources over the 30 years lifetime of the proposed Development are presented in the EIA report. This is presented as being approximately 98,061 tonnes of CO<sub>2</sub> per year, which means that a total saving of over 2.94 million tonnes of CO<sub>2</sub> will be made through displacement of carbon emitting generation.

The proposed Development is sited in an area with an already established use as a wind farm. The reuse of some of the existing infrastructure and the opportunity to explore the technological capabilities of future technologies in the repowering and extension of the existing wind farm, and seeking 30 years operational lifespan of this proposed Development are all in accordance with policy objectives in respect of the provision of renewable energy.

Scottish Ministers are satisfied that the proposed Development would provide a contribution to renewable energy targets and carbon savings, and that these would be of an order that weighs in favour of the proposed Development. The Scottish Ministers are satisfied that the proposed Development will contribute to the Scottish Government's strategic priorities.

Scottish Ministers in making their determination on the Application have had to balance these considerations, decide what weight is to be given to each and reach a view as to where the balance of benefit lies. Ministers consider the landscape and visual impacts are acceptable when weighed against the benefits of the increased low carbon electricity generation of the repowered and extension of Hagshaw Wind Farm will produce.

#### Conclusions

#### **Reasoned Conclusions on the Environment**

The Scottish Ministers are satisfied that the Environmental Impact Assessment Report has been produced in accordance with the EIA Regulations and that the procedures regarding publicity and consultation laid down in the those Regulations have been followed.

In accordance with paragraph 3 of Schedule 9 to the Electricity Act, the Scottish Ministers have had regard to the desirability of preserving the natural beauty of the countryside, of conserving flora, fauna, and geological and physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic, or archaeological interest. The Scottish Ministers must also avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.

The Scottish Ministers are satisfied that the Company has done what it reasonably can to mitigate any effect that the proposals would have on the natural beauty of the countryside or any such flora, fauna, features, sites, buildings or objects.

The Scottish Ministers have considered fully and carefully the Application, including the Environmental Impact Assessment Report, consultation responses and all other material information and, are satisfied that the environmental impacts of the proposed Development have been assessed and have taken the environmental information into account when reaching their decision.

Scottish Ministers are satisfied having regard to current knowledge and methods of assessment, that this reasoned conclusion addresses the likely significant effects of the development on the environment. Ministers are satisfied that this reasoned conclusion is up to date.

## **Duration of planning permission**

Section 58(1) of the Town and Country Planning (Scotland) Act 1997 provides that planning permission will lapse if development has not begun within a period of 3 years. Section 58(2) of that Act enables Ministers to direct that a longer period is allowed before planning permission will lapse.

Scottish Government policy is that due to the constraints, scale and complexity of constructing such developments, a 5-year time scale for the commencement of development is appropriate in this case. A direction by Scottish Ministers under section 58(2) of the Town and Country Planning (Scotland) Act 1997 has therefore been made as part of the determination for this consent.

# **The Scottish Ministers' Determination**

Subject to the conditions set out in **Annex 2 Part 1**, the Scottish Ministers **grant consent** under section 36 of the Electricity Act 1989 for the construction and operation of the Hagshaw Hill repowered and extended wind farm and energy storage facility, in the South Lanarkshire Council area (as described in the application and at **Annex 1**).

Subject to the conditions set out in **Annex 2 Part 2**, the Scottish Ministers direct that **planning permission be deemed to be granted** under section 57(2) of the Town and Country Planning (Scotland) Act 1997 in respect of the Development described in the application and at **Annex 1**.

#### Section 36 consent and expiry of Planning Permission

The consent hereby granted will last for a period of 30 years from the earlier of:

- The date when electricity is first exported to the electricity grid network from all of the wind turbines hereby permitted; or
- ii) The date falling 24 months after electricity is generated from the first of the wind turbines hereby permitted.

Scottish Ministers direct that section 58(1) of the Town and Country Planning (Scotland) Act 1997 is not to apply with regard to that planning permission because of the complexities of constructing a generating station of this scale, and that planning permission is to lapse on the expiry of a period of 5 years from the date of this direction, unless the development to which the permission relates is begun before the expiry of that period.

In accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, the Company must publicise notice of this determination and how a copy of this decision letter may be inspected on the application website, in the Edinburgh Gazette and a newspaper circulating in the locality in which the land to which the application relates is situated.

Copies of this letter have been sent to the public bodies consulted on the application including the Planning Authority, SNH, SEPA and Historic Environment Scotland. This letter has also been published on the Scottish Government Energy Consents website at <a href="http://www.energyconsents.scot">http://www.energyconsents.scot</a>

Scottish Ministers' decision is final, subject to the right of any aggrieved person to apply to the Court of Session for judicial review. Judicial review is the mechanism by which the Court of Session supervises the exercise of administrative functions, including how the Scottish Ministers exercise their statutory function to determine applications for consent. The rules relating to the judicial review process can be found on the website of the Scottish Courts:

https://www.scotcourts.gov.uk/docs/default-source/rules-and-practice/rules-of-court/court-of-session/chap58.pdf?sfvrsn=12

Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

Yours faithfully

Redacted

William Black
A member of the staff of the Scottish Ministers

#### ANNEX 1

# **Description of the Development**

The Development comprises an electricity generating station known as Hagshaw Hill Wind Farm Repowered including 14 turbines and energy storage facility with a generating capacity greater than 50MW, located approximately 3.2km west of Douglas in South Lanarkshire. The site is partly formed by the existing Hagshaw Hill Wind Farm, which currently comprises 26 existing turbines. The site also incorporates land to the south of the existing wind farm, all as described in the Application and Environmental Impact Assessment (EIA) Report submitted on 12 December 2018.

The components of the generating station and ancillary development comprise:

- 14 turbines to a maximum tip height of 200m;
- Energy Storage Facility (contained within compound approximately 100m x 60m);
- Turbine foundations;
- Crane hardstandings;
- Access tracks;
- Watercourse crossings;
- Drainage;
- Underground cabling;
- Substation and control room;
- Energy storage facility;
- Two permanent meteorological monitoring masts;
- Two construction compounds (one permanent and one temporary);
- Concrete batching plant;
- Temporary turbine laydown area;
- Borrow pits; and
- Removal of existing 26 turbines and appropriate restoration.

#### ANNEX 2

### Part 1 - Conditions Attached to Section 36 Consent

# 1. Notification of Date of First and Final Commissioning

Written confirmation of both the Date of First Commissioning and the Date of Final Commissioning shall be provided to the Planning Authority and Scottish Ministers no later than one calendar month after those dates.

**Reason:** To allow the Planning Authority and Scottish Ministers to calculate the date of expiry of the consent.

### 2. Commencement of Development

- (i) The Development shall be commenced no later than five years from the date of this consent, or such other period as the Scottish Ministers may direct in writing.
- (ii) Written confirmation of the intended date of Commencement of Development shall be provided to the Scottish Ministers and the Planning Authority no later than one calendar month before that date.

**Reason:** To ensure that the consent is implemented within a reasonable period and to allow the Planning Authority and Scottish Ministers to monitor compliance with obligations attached to this consent and deemed planning permission as appropriate.

#### 3. Non-assignation

This consent shall not be assigned without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may authorise the assignation, with or without conditions.

The Company shall notify the Scottish Ministers and Planning Authority in writing of the name of the assignee, principal named contact and contact details within fourteen days of the consent being assigned.

**Reason:** To safeguard the obligations of the consent if transferred to another company.

# 4. Serious Incident Reporting

In the event of any breach of health and safety or environmental obligations relating to the Development during the period of this consent written notification of the nature and timing of the incident shall be submitted to the Scottish Ministers within twenty-four hours of the incident occurring, including confirmation of remedial measures taken and/or to be taken to rectify the breach.

**Reason:** To keep the Scottish Ministers informed of any such incidents which may be in the public interest.

#### 5. Aviation Radar

### **Glasgow Airport**

- (1) Prior to the commencement of development, a Primary Radar Mitigation Scheme setting out measures to be taken to prevent the impairment of the performance of aerodrome navigation aid and the efficiency of air traffic control services at Glasgow Airport must be submitted to, and approved in writing by, the Scottish Ministers, in consultation with the Planning Authority and Glasgow Airport Limited
- (2) No wind turbine forming part of the Development shall be erected other than in accordance with the approved Primary Radar Mitigation Scheme.
- (3) The development must be constructed, commissioned and operated at all times fully in accordance with the approved Primary Radar Mitigation Scheme.

# NATS (En-Route) plc ("NERL)

- (4) No part of any turbine shall be erected above ground until a Primary Radar Mitigation Scheme agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to avoid the impact of the development on the Primary Radars of the Operator located at Lowther Hill and Cumbernauld and associated air traffic management operations.
- (5) No part of any turbine shall be erected above ground until the approved Primary Radar Mitigation Scheme has been implemented and the development shall thereafter be operated fully in accordance with such approved Scheme.

For the purpose of condition 5 above:

"**Operator**" means NATS (En Route) plc, incorporated under the Companies Act (4129273) whose registered office is 4000 Parkway, Whiteley, Fareham, Hants PO 15 7FL or such other organisation licensed from time to time under sections 5 and 6 of the Transport Act 2000 to provide air traffic services to the relevant managed area (within the meaning of section 40 of that Act).

"Primary Radar Mitigation Scheme" or "Scheme" means a detailed scheme agreed with the Operator which sets out the measures to be taken to avoid at all times the impact of the development on the Lowther Hill and Cumbernauld primary radars and air traffic management operations of the Operator.

**Reason:** In the interests of aviation safety.

#### 6. Peat Landslide Hazard Risk Assessment

(i) No Development shall commence unless and until supplementary information is provided to the Peat Landslide Hazard Risk Assessment and submitted to and approved in writing by the Scottish Ministers.

#### (ii) The PLHRA shall:

- provide details of further peat probing to ensure assessment of all areas of potential significant risk of peat landslide and hazard,
- comply with the guidance contained in "Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments" published by the Scottish Government in 2017, or such replacement standard as may be in place at the time of submission of the peat landslide hazard and risk assessment,
- Include details of any mitigation measures to be put in place.
- (iii) The approved PLHRA shall thereafter be implemented in full.

**Reason**: To minimise the risk of peat failure arising from the Development.

# 7. Storage Technology

- (i) No development shall commence unless and until details of the storage technology to be implemented have been submitted to and approved in writing by the Scottish Ministers.
- (ii) Thereafter, once installed, the approved storage technology shall be implemented and maintained in accordance with the approved details, unless agreed in writing with the Scottish Ministers.
- (iii) Written confirmation of when the Energy Storage Facility is installed and commissioned shall be provided to the Planning Authority and Scottish Ministers no later than one calendar month after those dates.
- (iv) There shall be no further installation of any storage technology, unless and until details of the storage technology to be installed have been submitted to and approved in writing by the Scottish Ministers.

**Reason:** In the interests of protecting the environment.

#### Annex 2

# Part 2 - Conditions Attached to Deemed Planning Permission

# 1. Implementation in accordance with approved plans and requirements of the section 36 consent

Except as otherwise required by the terms of the section 36 consent and deemed planning permission, the Development shall be undertaken in accordance with the application and the accompanying Environmental Impact Assessment (EIA) Report including all Appendices, date December 2018, including all mitigation and monitoring measures stated in it, and other documentation lodged in support of the application.

**Reason:** to ensure that the Development is carried out in accordance with the approved details.

# 2. Design and operation of wind turbines

- (i) No Development shall commence unless and until full details of the proposed wind turbines (including, but not limited to, the power rating and sound power levels, the size, type, external finish and colour), any anemometry masts and all associated apparatus have been submitted to and approved in writing by the Planning Authority.
- (ii) The wind turbines shall be constructed and operated in accordance with the approved details and maintained in the approved colour, free from external rust staining or discolouration, until the wind farm is decommissioned.
- (iii) All wind turbine blades shall rotate in the same direction.

**Reason:** To ensure that the environmental impacts of the turbines forming part of the Development conform to the impacts assessed in the environmental statement and in the interests of the visual amenity of the area.

## 3. Signage

No wind turbine, anemometer, power performance mast, switching station, transformer building or enclosure, ancillary building or above ground fixed plant shall display any name, logo, sign or advertisement (other than health and safety signage) unless and until otherwise approved in writing by the Planning Authority.

**Reason:** in the interests of the visual amenity of the area.

## 4. Design of Energy Storage Facility

No construction of the Energy Storage Facility shall commence unless and until details of the external finishes of the Energy Storage Facility have been submitted to and approved in writing by the Planning Authority. The approved details shall be implemented unless otherwise agreed by the Planning Authority.

### 5. Design of sub-station and ancillary development

Prior to the commencement of works in respect of each or any of;

- control building;
- substation;
- associated compounds;
- any construction compound boundary fencing;
- · external lighting; and
- parking areas.

Final details of the external appearance, dimensions, and surface materials of the relevant element shall be submitted to and approved in writing by the Planning Authority.

The substation building, associated compounds, fencing, external lighting and parking areas approved shall be constructed in accordance with the approved details.

**Reason:** To ensure that the environmental impacts of the sub-station and ancillary development forming part of the Development conform to the impacts assessed in the EIA Report and in the interests of the visual amenity of the area.

# 6. Micro-siting

Each turbine, buildings, compounds, areas of hardstanding, tracks and watercourse crossings shall be erected in the position indicated upon Figure 1.2A (site layout Plan - West) within the Environmental Impact Assessment Report, dated December 2018. A variation of the indicated position of any turbine or other development infrastructure detailed on the approved drawing shall be notified on the following basis:

- (a) If the micro-sited position is less than 50 metres it shall only be permitted following the approval of the Ecological Clerk of Works (ECoW) in consultation with SEPA and West of Scotland Archaeology Service
- (b) If the micro-sited position is of between 50 metres and 100 metres it shall only be permitted following written approval of the Planning Authority in consultation with SEPA and West of Scotland Archaeology Service. The said provisions relating to micro-sited position shall not have the effect such that any micro-sited position will:
  - bring a turbine any closer to an uninvolved property than is already approved
  - bring a turbine out with the planning application boundary
  - breach the 50m water buffer zones
  - take place within areas of peat of greater depth than the original location.

**Reason:** to control environmental impacts while taking account of local ground conditions.

#### 7. As Built Plan

Within 3 months of commissioning the approved wind farm the applicant shall submit to the Planning Authority an "as built plan" at an appropriate scale indicating the location of any track, turbine, energy storage facility, crane pad and restored borrow pit within the development.

Reason: In order to retain effective planning control

#### 8. Borrow Pits - Scheme of Works

No Development shall commence unless and until a scheme for the working and restoration of each borrow pit has been submitted to, and approved in writing by, the Planning Authority. The scheme shall include:

- (a) a detailed working method statement based on site survey information and ground investigations;
- (b) details of the handling of any overburden (including peat, soil and rock);
- (c) drainage measures, including measures to prevent surrounding areas of peatland, water dependant sensitive habitats and Ground Water Dependent Terrestrial Ecosystems (GWDTE) from drying out;
- (d) a programme of implementation of the works described in the scheme; and
- (e) details of the reinstatement, restoration and aftercare of the borrow pit(s) to be undertaken at the end of the construction period, including topographic surveys of pre-construction profiles and details of topographical surveys to be undertaken of the restored borrow pit profiles.

The approved scheme shall be implemented in full.

**Reason:** To ensure that excavation of materials from the borrow pit(s) is carried out in a manner that minimises the impact on road safety, amenity and the environment, and to secure the restoration of borrow pit(s) at the end of the construction period.

#### 9. Borrow Pits - Blasting

No blasting shall take place until a blasting method statement has been submitted to and approved in writing by the Planning Authority.

The method statement shall include details of measures required to minimise the impact of blasting on residential and other noise-sensitive properties in the vicinity of the site. It shall also include the following measures:

- Blasting shall be carried out using the best practicable means of ensuring that the resultant noise, vibration and air overpressure are minimised;

- Blasting techniques and instantaneous charge levels shall be employed such that the predicted peak particle velocity shall not exceed 6 mm/s in any plane in 95% of all blasts, and no individual blast shall exceed a peak particle velocity of 12 mm/s as would be measured on the ground adjacent to any vibration-sensitive building;
- Under normal atmospheric conditions, the peak linear overpressure level shall not exceed 120dB as measured from any neighbouring noise sensitive premises;
- Within the constraints of safe practice, blasting shall be avoided under weather conditions which are likely to direct or focus the blast air overpressure towards neighbouring noise sensitive properties; and
- Blasting shall thereafter be carried out in accordance with the approved method statement, unless otherwise agreed in writing with the Planning Authority.

No blasting shall take place except between the following times: 10.00 - 12.00 and 14.00 - 16.00-Mondays to Fridays and; 10.00- 12.00 Saturdays.

**Reason:** To ensure that blasting activity is carried out within defined timescales to control impact on amenity.

# 10. Planning Monitoring Officer

No development shall commence unless and until the terms of appointment by the Company of an independent and suitably qualified environmental consultant as Planning Monitoring Officer ("PMO") have been submitted to, and approved in writing by, the Planning Authority. The terms of appointment shall:

- (a) impose a duty to monitor compliance with the terms of the deemed planning permission and the conditions attached to it;
- (b) require to set out the frequency of PMO visits to site;
- (c) require the PMO to submit a monthly report to the Planning Authority summarising works undertaken on site; and
- (d) require the PMO to report to the Planning Authority any incidences of non-compliance with the terms of the deemed planning permission and conditions attached to it at the earliest practical opportunity.

The PMO shall be appointed on the approved terms throughout the period from Commencement of Development to completion of post construction restoration works.

**Reason:** To enable the development to be suitably monitored to ensure compliance with the planning permission and the conditions attached to it.

### 11. Ecological Clerk of Works

No Development shall commence unless and until the terms of appointment of an independent Ecological Clerk of Works ("ECoW") by the Company have been submitted to, and approved in writing by the Planning Authority (in consultation with SNH and SEPA). The terms of appointment shall:

- (a) impose a duty to monitor compliance with the ecological and hydrological commitments and mitigations measures provided in the EIA Report and other information lodged in support of the application, the Construction and Environmental Management Plan approved under condition 13, the Habitat Management Plan approved under condition 18, any species or habitat management plans identified in the Environmental Statement and other plans approved under condition 11 ("the ECoW works");
- (b) require the ECoW to report to the nominated construction project manager any incidences of non-compliance with the ECoW works at the earliest practical opportunity;
- (c) require the ECoW to submit a monthly report to the Planning Authority summarising works undertaken on site;
- (d) require the ECoW to report to the Planning Authority any incidences of non-compliance with the ECoW works at the earliest practical opportunity;
- (e) Advising the Company on adequate protection of nature conservation interests on the site; and
- (f) Directing the micro siting and placement of the turbines and infrastructure.

The ECoW shall be appointed on the approved terms throughout the period from Commencement of Development to completion of post construction restoration works.

**Reason:** To secure effective monitoring of and compliance with the environmental mitigation and management measures associated with the Development during the construction and restoration phases.

## 12. Ecological Clerk of Works Decommissioning Phase

No later than eighteen months prior to decommissioning of the Development or the expiry of the section 36 consent (whichever is the earlier), details of the terms of appointment of an ECoW by the Company throughout the decommissioning, restoration and aftercare phases of the Development shall be submitted for the written approval of the Planning Authority in consultation with SNH and SEPA.

The ECoW shall be appointed on the approved terms throughout the decommissioning, restoration and aftercare phases of the Development.

**Reason:** To secure effective monitoring of and compliance with the environmental mitigation and management measures associated with the Development during the decommissioning, restoration and aftercare phases.

### 13. Construction and Environmental Management Plan

No development work shall commence until a Construction Environmental Management Plan (CEMP) including Peat Management Plan and Ground Water and Surface Water Monitoring Plan has been submitted to and approved by the Planning Authority in consultation with SEPA and SNH. The CEMP shall be submitted a minimum of two months prior to works commencing on site and shall incorporate "good practice" methods from the Scottish UK wind farm industry to ensure that environmental impacts are reduced and incorporate all the mitigation measures identified in the EIA Report and Appendices dated December 2018.

Thereafter, all the measures described in the approved CEMP shall be implemented within the timescales set out. The method statement shall include the following:

- a) A plan of the construction operations at an appropriate scale, showing the location of any contractor's site compound and laydown areas required temporarily in connection with the construction of the development;
- (b) A site waste management plan (dealing with all aspects of waste produced from the decommissioning, restoration and aftercare phases of the 26 turbines);
- c) Track design approach Method of defining track route and location (track corridors should be pegged out 500 1000m in advance of operations);
- d) Drainage Strategy;
- e) Maps of tracks indicating double and single tracks and position of passing places:
- f) The full extent of anticipated track 'footprint(s)' including extent of supporting 'geogrid' below roadstone and cabling at the edges of the track;
- g) Track construction: Floating track construction over peat >1m deep and gradients of 1:10 or less. Track construction for peat <1m deep, or on gradients of >1:10, cross slopes or other ground unsuitable for floating roads;
- h) Procedures to be followed when, during track construction, it becomes apparent that the chosen route is more unstable or sensitive than was previously concluded, including ceasing work until a solution is identified, informed with reference to advice from ECoW:
- i) Details of peat/soil stripping, storage and re-use. All soils stored on site shall be in accordance with BS3882 and SNH and SEPA guidance;
- j) A management plan for minimising the emission of dust from the construction and operation of the development;

- k) Specifying the means by which material to be used for the development is brought on site unless it has certification from a suitably UKAS accredited laboratory to confirm that the material is not contaminated;
- I) Compliance with the Council's Sustainable Drainage Systems (SuDs) design criteria guidance and inclusive sign off by the relevant parties carrying out the elements of work associated with the design criteria appendices 1 to 4;
- m) A coloured plan showing the sustainable drainage apparatus serving the application site together with the contact name and emergency telephone number of the party responsible for its future maintenance. Details of the future maintenance regime in accordance with the latest Construction Design and Management (CDM) Regulations is to be provided on this drawing;
- n) Peat Management Plan (PMP) a PMP shall be submitted to and approved by the Planning Authority in consultation with SEPA and SNH and thereafter all work will be carried out in accordance with the plan within the required timescales:
- o) A description of and measures to mitigate impact on surface water courses, hydrology, and private water supplies;
- p) Watercourse crossings should be kept to a minimum to ensure they do not adversely impact on natural flow pathways. These crossings shall be appropriately sized so that they can convey the 1 in 200 year flow (plus an appropriate allowance for climate change and freeboard), and overland flow routes shall be provided in the event of culvert blockage. This will minimise the risk of damage to existing and proposed access tracks. Watercourse crossings shall be designed in accordance with the principles of Scottish Planning Policy (SPP) and have a better or neutral effect on flood risk and a minimal afflux (backwater effect) and a clear span structure where possible;
- q) Measures to be taken to ensure that the work does not cause mud, silt, or concrete to be washed away either during the construction stage or as a result of subsequent erosion. Where possible construction works shall avoid road construction during high periods of high rainfall;
- r) Timing and extent of any necessary re-instatement;
- s) Details of the site security gate, wheel wash facility and site entrance hard standing for the written approval of the Planning Authority. All work associated with construction of the access gate, access bell mouth (with associated abnormal load over run area) and wheel wash facility, vehicle parking on site for staff, visitors and deliveries to ensure that all vehicles can manoeuvre within the site and exit in forward gear shall be implemented on site prior to commencement of any internal site works. Details for wheel wash facility to maintain the public road network clear of any mineral/soils throughout the construction period;

- t) Ground Water and Surface Water Monitoring Plan shall be submitted to and approved by the Planning Authority in consultation with SEPA. All works require to be carried out by component qualified professional. The methodology of such monitoring including locations frequency, gathering of information of baseline levels, etc. shall be submitted to the planning authority for approval prior to the commencement of works on site. Thereafter, the plan shall be implemented within the timescales set out to the satisfaction of the Planning Authority and the results of such monitoring shall be submitted to the planning authority on a 6 monthly basis, or on request;
- u) A monitoring plan shall be submitted to the planning authority setting out the steps that shall be taken to monitor the environmental effects of the development, including the effects on noise and dust, during the construction phase and the operational phase. The methodology of such monitoring including locations frequency, gathering of information on background levels, etc. shall be submitted to the planning authority for approval prior to the commencement of works on site;
- v) Water Quality and Fish Monitoring Plan (WQFMP) All works require to be carried out by competent qualified professional. The WQFMP must take account of the Scottish Government's Marine Scotland Science's response and must include:
  - (a) Pre-construction baseline water quality sampling and hydrochemical sampling. The methodology of such monitoring including locations frequency, gathering of information of baseline levels, etc. requires to be approved by the Planning Authority in consultation with Marine Scotland Science:
  - (b) Fish monitoring programme to detect any changes in fish populations before, during and for at least 12 months after construction work associated with the Development;
  - (c) Appropriate site specific mitigation measures and in agreement with the Planning Authority and Marine Scotland Science; and
  - (d) Quantitative electrofishing surveys at control sites; and
  - (e) Mitigation measures detailed in the Environmental Impact Assessment.

Thereafter, the WQFMP shall be implemented within the timescales set out to the satisfaction of the Planning Authority in consultation with Marine Scotland Science and the results of such monitoring shall be submitted to the Planning Authority on a 6 monthly basis, or on request; and

w) Pre-construction surveys for protected species including but not limited to breeding birds, otter, water vole and badger. Species protection plans for species identified within the site including a watching brief for the ECoW during construction.

The approved CEMP shall be implemented in full unless otherwise approved in advance in writing by the Planning Authority in consultation with SNH and SEPA, and the results of such monitoring shall be submitted to the Planning Authority on a six monthly basis, or on request.

**Reason:** To ensure that all construction operations are carried out in a manner that minimises their impact on road safety, amenity and the environment, and that the mitigation measures contained in the EIA Report accompanying the application, or as otherwise agreed, are fully implemented.

#### 14. Construction Hours

All construction work associated with the development must be carried out in accordance with the current BS 5228, 'Noise control on construction and open sites' and all audible construction activities shall be limited to:

Monday to Friday 7:00am to 7:00pm, Saturday 7:00am to 1:00pm;

With no audible activity taking place on Sunday, local and national bank holiday. Out with these periods, works at the site shall be limited to emergency works and dust suppression, unless otherwise approved in writing by the local planning authority. The local planning authority shall be informed in writing of emergency works within three working days of occurrence.

Subject to condition 8, any noise solely attributable to construction noise (where borrow pits are not operational) should not exceed 65dB(A) LAeq to include both stationary and mobile plant as described within Annex F- Code of practice for noise and vibration control on construction and open sites - Part 1: Noise (BS 5228-1:2009).

**Reason:** In the interests of local amenity.

## 15. Traffic Management Plan

No Development shall commence unless and until a detailed Traffic Management Plan (TMP) has been submitted for the written approval of the Council as Roads Authority in consultation with Transport Scotland, and thereafter the TMP shall be adhered to and implemented within the timescales set out. The TMP shall be produced in consultation with Roads & Transportation Services and Transport Scotland and include, but not be limited to, a safety audit for the Abnormal Loads Route, onsite parking, travel plan, wheel wash facilities and construction route signage. No works shall commence on site until such times as the TMP has been approved in writing by the Council as Roads Authority in consultation with Transport Scotland.

The approved TMP shall be implemented in full, unless and until otherwise agreed in advance in writing with the Planning Authority and in consultation with Transport Scotland.

**Reason:** In the interests of road safety.

#### 16. Abnormal Load Route Assessment

At least 3 months prior to the delivery of abnormal loads the Company will undertake an Abnormal Load Route Assessment (ALRA) which shall include a test run and submit a report describing the outcome of the ALRA together with any recommendations for the written approval of the Council as Roads Authority and in consultation with Transport Scotland. The ALRA shall include details of a public relation strategy to inform the relevant communities of the programme of abnormal deliveries. The recommendations shall thereafter be implemented in accordance with a programme to be approved by the Planning Authority in consultation with Transport Scotland and shall be implemented prior to the delivery of the abnormal loads. Should the Abnormal Load route include any bridge crossings, prior to the commencement of the development clarification on the Bridge Assessments require to be submitted to and approved by the Council as Roads Authority, and recommendations shall thereafter be implemented in accordance with the approved programme.

**Reason:** In the interests of road safety and to ensure that abnormal loads access the site in a safe manner.

# 17. Access Management Plan

- (i) No Development shall commence unless and until a detailed Access Management Plan (AMP) has been submitted for the written approval of the Planning Authority, and thereafter the AMP shall be adhered to and implemented within the timescales set out.
- (ii) The AMP shall be produced in consultation with the Council's Countryside & Greenspace Services and a programme of community consultation shall be undertaken on a draft AMP. Proposals shall incorporate and identify the Council's Core Path and Wider Network and provide signage where the network identifies links. No works shall commence on site until such times as the AMP has been approved in writing by the Planning Authority.
- (iii) The approved AMP shall be implemented in full, unless and until otherwise agreed in advance in writing with the Planning Authority.

**Reason:** In the interests of amenity and in order to retain effective planning control.

#### 18. Habitat Management Plan

- (i) No development shall commence unless and until a Habitat Management Plan (HMP) has been submitted to, and approved in writing by the Planning Authority.
- (ii) The HMP shall set out proposed habitat management of the site during the period of construction, operation, decommissioning, restoration and aftercare, and shall provide for the maintenance, monitoring and reporting of habitat improvements and creation of new habitats to aid biodiversity on site.

- (iii) The HMP shall include provision for regular monitoring and review to be undertaken to consider whether amendments are needed to better meet the habitat plan objectives. In particular, the approved HMP shall be updated to reflect ground condition surveys undertaken following construction and prior to the date of Final Commissioning and submitted for the written approval of the Planning Authority.
- (iv) The HMP shall set out details of the implementation of a Habitat Management Group.
- (v) Unless and until otherwise agreed in advance in writing with the Planning Authority, the approved HMP (as amended from time to time) shall be implemented in full and within the timescales set out in the approved HMP.

**Reason:** In the interests of good land management and the protection of habitats.

## 19. Habitat Management Group

A Habitat Management Group (HMG) shall be established prior to Final Commissioning to oversee the preparation and delivery of the HMP and to review and assess the results from ongoing monitoring. The HMG shall include a representative of South Lanarkshire Council and shall have powers to make reasonable changes to the HMP necessary to deliver its agreed aims, and notwithstanding the above:

- a) Site clearance activities and where possible, construction, will take place out with the bird breeding season (March to July inclusive). If site clearance activities commence during this period ECoW supervision is required;
- b) No ancient woodland to the south of the access track is to be removed:
- c) The HMP will operate for the full lifespan of the wind farm, including decommissioning
- d) The agreed proposals identified in the HMP will be fully implemented; and
- e) Surveillance and monitoring results of species and habitat will be carried out in accordance with the approved plan and be submitted to the HMG in accordance with the timescales set out.

**Reason:** To safeguard environmental impacts, ecology, species and habitats and maintain effective planning control.

## 20. Bat Protection

No Development shall commence until a bat post-construction monitoring plan has been submitted and approved in writing by the Planning Authority in consultation with SNH. Thereafter the recommended mitigation shall be implemented in accordance with the approved plan. The plan shall include details on acoustic monitoring with static automated detectors (full spectrum) for at least 1 complete bat active season (i.e. April to October), combined with at least 3 years of carcass searching after Final Commissioning.

If casualties are detected, more intensive carcass searches, using the method detailed in Appendix 4 of the "Bats and Onshore Wind Turbines: Survey, Assessment and Mitigation" guidance.

There shall be wind turbine curtailment in the form of blade feathering while idling (as a minimum) at wind turbines 13, 14, 6 and 7.

No wind turbines shall be located where part of their structure or blades falls within 50m of features of value to bats, unless otherwise agreed in writing by the Planning Authority in consultation with SNH. Wind turbines 6, 13 and 14 should not be sited closer than 65.7m to the woodland edge and/or watercourses.

**Reason:** In the interests of protecting and monitoring bats.

## 21. Deer Management Statement

- (i) No Development shall commence unless and until a deer management statement has been submitted to, and approved in writing by, the Planning Authority in consultation with SNH.
- (ii) The deer management statement shall set out proposed long term management of deer using the site and shall provide for the monitoring of deer numbers on site from the period from Commencement of Development until the date of completion of restoration.
- (iii) The approved deer management statement (as amended from time to time subject to the approval of the Planning Authority in consultation with SNH) shall be implemented in full.

**Reason:** In the interests of protecting and monitoring deer.

#### 22. Programme of Archaeological Works

- (i) No Development shall commence unless and until the Company has secured the implementation of a programme of archaeological works in accordance with a written scheme of investigation which has been submitted by the applicant, agreed by West of Scotland Archaeology Service and approved by the Council, as Planning Authority.
- (ii) Thereafter, the developer shall ensure that the programme of archaeological works is fully implemented and that all recording and recovery of archaeological resources within the development site is undertaken to the satisfaction of the Council as Planning Authority, in agreement with the West of Scotland Archaeology Service.
- (iii) The approved programme of archaeological works shall be implemented in full.

**Reason:** To ensure the protection or recording of archaeological features on the site.

#### 23. Shadow Flicker

No Development shall commence unless and until a scheme for the avoidance or mitigation of any shadow flicker at residential and commercial properties situated at a distance which is the same as ten rotor diameters of any wind turbine forming part of the Development, which lawfully exist or for which planning permission has been granted at the date of the section 36 consent, has been submitted to, and approved in writing by, the Planning Authority.

The approved mitigation scheme shall be implemented in full.

**Reason:** To offset impacts of shadow flicker on residential and commercial property amenity.

# 24. Warning Devices

No fixed or mobile plant used within the site during the construction period shall incorporate bleeping type warning devices that are audible at any noise sensitive receptor. Details of alternative warning devices shall be submitted to and approved in writing by the Planning Authority prior to development starting on site. Efficient silencers shall be fitted to, used and maintained in accordance with manufacturers' instructions on all vehicles, plant and machinery used on the development site.

**Reason:** To minimise disturbance to residents in the vicinity of the wind farm.

## 25. Private Water Supplies

- (1) No Development shall commence unless and until a method statement and monitoring plan has been submitted to, and approved in writing by, the Planning Authority.
- (2) This must detail all mitigation measures to be taken to secure the quality, quantity and continuity of water supplies to properties which are served by private water supplies at the date of the section 36 consent and which may be affected by the Development.
- (3) The method statement shall include water quality sampling methods and shall specify abstraction points.
- (4) Unless and until otherwise agreed in advance in writing with the Planning Authority, the approved method statement and monitoring plan shall be implemented in full.
- (5) Monitoring results shall be submitted to the Planning Authority on a quarterly basis or on request during the approved programme of monitoring.

**Reason:** To maintain a secure and adequate quality water supply to all properties with private water supplies this may be affected by the Development.

#### 26. Redundant turbines

Unless otherwise agreed in writing by the Planning Authority, if one or more wind turbines fails to generate electricity for a continuous period of twelve months a scheme setting out how the relevant wind turbine(s) and associated infrastructure will be removed from the site and the ground restored shall be submitted for the written approval of the Planning Authority no later than one month after the date of expiry of the twelve month period.

The approved scheme shall be implemented within six months of the date of its approval, to the satisfaction of the Planning Authority.

**Reason:** To ensure that any redundant wind turbine(s) are removed from Site, in the interests of safety, amenity and environmental protection.

### 27. Aviation Safety

No Development shall commence unless and until the Planning Authority, Ministry of Defence, Defence Geographic Centre and NATS have been provided with the following information, and evidence has been provided to the Planning Authority that this has been done:

- a) the date of the expected commencement of each stage of construction;
- b) the height above ground level of the tallest structure forming part of the Development;
- c) the maximum extension height of any construction equipment; and the position of the wind turbines and masts in latitude and longitude.

**Reason:** In the interests of aviation safety.

## 28. Aviation Lighting

- (i) No wind turbines shall be erected unless and until a scheme for aviation lighting for the Development has been submitted to, and approved by, the Planning Authority. The scheme shall include details of any aviation lighting required by Civil Aviation Authority and Ministry of Defence that is to be applied.
- (ii) No lighting other than that described in the scheme shall be applied, other than that required for health and safety purposes, unless otherwise agreed in writing by the Planning Authority.
- (iii) The required aviation lighting shall thereafter be maintained as approved for the lifetime of the Development.
- (iv) The Development shall be operated in accordance with the approved scheme.

**Reason:** In the interests of aviation safety and visual amenity.

### 29. Decommissioning Method Statement for Hagshaw Hill Wind Farm

- (i) No development shall commence until an outline Decommissioning Method Statement (DMS) for the dismantling of the existing 26 wind turbines and their associated infrastructure which form part of the Hagshaw Hill Wind Farm development and any associated ground restoration works is submitted for the written approval of the Planning Authority.
- (ii) Thereafter the Decommissioning Method Statement shall be implemented in full unless otherwise agreed with the Planning Authority.

**Reason:** To ensure that all decommissioning operations are carried out in a manner that minimises their impact on road safety, amenity and the environment, and that the mitigation measures contained in the EIA Report accompanying the application are fully implemented.

## 30. Site Decommissioning, Restoration and Aftercare Strategy

No Development shall commence unless and until a decommissioning, restoration and aftercare strategy has been submitted to, and approved in writing by, the Planning Authority (in consultation with SNH and SEPA). The strategy shall outline measures for the decommissioning of the Development and restoration and aftercare of the site, and shall include proposals for the removal of the Development, the treatment of ground surfaces, the management and timing of the works and environmental management provisions.

**Reason:** To ensure the decommissioning and removal of the Development in an appropriate and environmentally acceptable manner and the restoration and aftercare of the site, in the interests of safety, amenity and environmental protection.

#### 31. Site Decommissioning, Restoration and Aftercare Plan

- (i) No later than five years prior to decommissioning of the Development or the expiry of the section 36 consent (whichever is the earlier) a detailed decommissioning, restoration and aftercare plan, based upon the principles of the approved decommissioning, restoration and aftercare strategy (condition 29), shall be submitted for the written approval of the Planning Authority in consultation with SNH and SEPA.
- (ii) The total period for decommissioning and restoration of the Site in accordance with this condition shall not exceed 33 years from the Date of Final Commissioning without the prior written approval of the Scottish Ministers in consultation with the Planning Authority.

- (iii) The detailed decommissioning, restoration and aftercare plan shall provide updated and detailed proposals, in accordance with relevant guidance at that time, for the removal of the Development, the treatment of ground surfaces, the management and timing of the works and environment management provisions which shall include (but is not limited to):
  - (a) a site waste management plan (dealing with all aspects of waste produced during the decommissioning, restoration and aftercare phases);
  - (b) details of the formation of the construction compound, welfare facilities, any areas of hardstanding, turning areas, internal access tracks, car parking, material stockpiles, oil storage, lighting columns, and any construction compound boundary fencing;
  - (c) a dust management plan;
  - (d) details of measures to be taken to prevent loose or deleterious material being deposited on the local road network, including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent local road network;
  - (e) a pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site:
  - (f) details of measures for soil storage and management;
  - (g) a surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and location of settlement lagoons for silt laden water;
  - (h) details of measures for sewage disposal and treatment;
  - (i) temporary site illumination;
  - (j) the construction of any temporary access into the site and the creation and maintenance of associated visibility splays;
  - (k) details of watercourse crossings; and
  - (I) a species protection plan based on surveys for protected species (including birds) carried out no longer than eighteen months prior to submission of the plan.
- (iv) The Development shall be decommissioned, the site restored and aftercare undertaken in accordance with the approved plan, unless and until otherwise agreed in writing in advance with the Planning Authority in consultation with SNH and SEPA.

**Reason:** To ensure the decommissioning and removal of the Development in an appropriate and environmentally acceptable manner and the restoration and aftercare of the site, in the interests of safety, amenity and environmental protection.

### 32. Site Inspection Plan

- (1) Prior to the Date of Final Commissioning, the Company must submit a draft Site Inspection Strategy (SIS), for the written approval of the Planning Authority. This shall set out details for the provision of site inspections and accompanying Site Inspection Reports (SIR) to be carried out at 25 years of operation from the Date of Final Commissioning. At least one month in advance of submitting the SIR, the scope of content shall be agreed with the Planning Authority. The SIR shall include, but not be limited to:
  - (a) Requirements to demonstrate that the infrastructure of the Development is still fit for purpose and operating in accordance with condition 2 and condition 35; and
  - (b) An engineering report which details the condition of tracks, turbine foundations and the wind turbine generators and sets out the requirements and the programme for the implementation for any remedial measures which may be required.
- (2) Thereafter the SIS and SIR shall be implemented in full unless otherwise agreed in advance in writing by the Planning Authority.

**Reason:** To ensure the condition of the infrastructure associated with the Development is compliant with the EIA report, condition 2 and condition 35 and is to ensure the Development is being monitored at regular intervals throughout its operation.

## 33. Financial Guarantee

At least one month prior to the commencement of the development, a guarantee to cover all site restoration and aftercare liabilities imposed on the expiry of this consent will be submitted for the written approval of the planning authority. Such guarantee must-

- i. be granted in favour of the planning authority;
- ii. be granted by a bank or other institution which is of sound financial standing and capable of fulfilling the obligations under the guarantee:
- iii. be for an amount which covers the value of all site restoration and aftercare liabilities as determined by the planning authority at the commencement of development;
- iv. contain provisions so that all the site restoration and aftercare liabilities as determined at the commencement of development shall be increased on each fifth anniversary of the date of this consent;
- v. come into effect on or before the date of commencement of development, and expire no earlier than 24 months after the end of the aftercare period;

No work shall begin at the site until (1) written approval of the Planning Authority has been given to the terms of such guarantee and (2) thereafter the validly executed guarantee has been delivered to the Planning Authority.

In the event that the guarantee becomes invalid for any reason, no operations will be carried out on site until a replacement guarantee completed in accordance with the terms of this condition is lodged with the Planning Authority.

**Reason:** to ensure that there are sufficient funds to secure performance of the decommissioning, restoration and aftercare conditions attached to this deemed planning permission in the event of default by the Company.

# 34. Unoccupied Property

That the property Low Broomerside shall remain unoccupied for the lifetime of the Development hereby approved unless otherwise agreed in writing by the Planning Authority.

**Reason:** In the interests of residential amenity.

#### 35. Noise

The rating level of noise immissions from the combined effects of the wind turbines (including the application of any tonal penalty) when determined in accordance with the attached Guidance Notes (to this condition), shall not exceed the values for the relevant integer wind speed set out in, or derived from, the table attached to these conditions at any dwelling which is lawfully existing or has planning permission at the date of this permission and:

- a) The wind farm operator shall continuously log power production, wind speed and wind direction, all in accordance with Guidance Note 1(d). These data shall be retained for a period of not less than 24 months. The wind farm operator shall provide this information in the format set out in Guidance Note 1(e) to the Local Planning Authority on its request, within 14 days of receipt in writing of such a request.
- b) No electricity shall be exported until the wind farm operator has submitted to the Local Planning Authority for written approval a list of proposed independent consultants who may undertake compliance measurements in accordance with this condition. Amendments to the list of approved consultants shall be made only with the prior written approval of the Local Planning Authority.
- c) Within 21 days from receipt of a written request from the Local Planning Authority following a complaint to it from an occupant of a dwelling alleging noise disturbance at that dwelling, the wind farm operator shall, at its expense, employ a consultant approved by the Local Planning Authority to assess the level of noise immissions from the wind farm at the complainant's property in accordance with the procedures described in the attached Guidance Notes. The written request from the Local Planning Authority shall set out at least the date, time and location that the complaint relates to and any identified atmospheric conditions, including wind direction, and include a statement as to whether, in the opinion of the Local Planning Authority, the noise giving rise to the complaint contains or is likely to contain a tonal component.

- d) The assessment of the rating level of noise immissions shall be undertaken in accordance with an assessment protocol that shall previously have been submitted to and approved in writing by the Local Planning Authority. The protocol shall include the proposed measurement location identified in accordance with the Guidance Notes where measurements for compliance checking purposes shall be undertaken, whether noise giving rise to the complaint contains or is likely to contain a tonal component, and also the range of meteorological and operational conditions (which shall include the range of wind speeds, wind directions, power generation and times of day) to determine the assessment of rating level of noise immissions. The proposed range of conditions shall be those which prevailed during times when the complainant alleges there was disturbance due to noise, having regard to the written request of the Local Planning Authority under paragraph (c), and such others as the independent consultant considers likely to result in a breach of the noise limits.
- e) Where a dwelling to which a complaint is related is not listed in the tables attached to these conditions, the wind farm operator shall submit to the Local Planning Authority for written approval proposed noise limits selected from those listed in the Tables to be adopted at the complainant's dwelling for compliance checking purposes. The proposed noise limits are to be those limits selected from the Tables specified for a listed location which the independent consultant considers as being likely to experience the most similar background noise environment to that experienced at the complainant's dwelling. The rating level of noise immissions resulting from the combined effects of the wind turbines when determined in accordance with the attached Guidance Notes shall not exceed the noise limits approved in writing by the Local Planning Authority for the complainant's dwelling.
- f) The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment of the rating level of noise immissions undertaken in accordance with the Guidance Notes within 2 months of the date of the written request of the Local Planning Authority for compliance measurements to be made under paragraph (c), unless the time limit is extended in writing by the Local Planning Authority. The assessment shall include all data collected for the purposes of undertaking the compliance measurements, such data to be provided in the format set out in Guidance Note 1(e) of the Guidance Notes. The instrumentation used to undertake the measurements shall be calibrated in accordance with Guidance Note 1(a) and certificates of calibration shall be submitted to the Local Planning Authority with the independent consultant's assessment of the rating level of noise immissions within 21 days of submission of the independent consultant's assessment pursuant to paragraph (d) above unless the time limit has been extended in writing by the Local Planning Authority.

Table 1 - Noise Limits for the predicted worst case scenario (Proposed development only) - Noise limits expressed in dB LA90,10 minute as a function of the standardised wind speed (m/s) at 10 metre height as determined within the site averaged over 10 minute periods.

#### Location

Standardised wind speed at 10 meter height (m/s) within the site averaged over 10-minute periods.

Receptor	4m/s	5m/s	6m/s	7m/s	8m/s	9m/s	10m/s	11m/s	12m/s
Shielpark	24	30	32	33	32	32	32	32	32
Monksfoot	30	36	38	39	38	38	38	38	38
Carmacoup Fm Cott	26	32	34	35	34	34	34	34	34
Viaduct Cottage	27	32	35	35	35	35	35	35	35
Bungalow Cottage	25	31	33	34	33	33	33	33	33
Longhouse Cottage	26	31	34	34	34	34	34	34	34
Braeface Cottage	27	32	34	35	35	35	35	35	35
Hillview Crescent	27	32	35	35	35	35	35	35	35
Hazelside Farm	25	30	33	33	33	33	33	33	33
Station House	24	30	32	33	32	32	32	32	32
Blackwood Cottage	24	29	32	32	32	32	32	32	32
Scrogton	22	27	30	30	30	30	30	30	30
Scrogtonhead	24	29	32	32	32	32	32	32	32

The above values are subject to the accuracy of tables 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7 and 9.8 The Hagshaw Hill Wind Farm Repowering Noise and Vibration statement Chapter 9. This as described within the attached advisory as they relate to the day and night immisions both from the proposed development and also the resultant cumulative levels at those receptors identified.

Hazelside Farm and Blackwood Cottage are financially involved and are attributed the elevated immission level of 45dB measured as an LA90,10 minute.

#### Guidance Notes for Wind Farm Noise Conditions

These notes are to be read with and form part of the noise condition. They further explain the condition and specify the methods to be employed in the assessment of complaints about noise immissions from the wind farm. The rating level at each integer wind speed is the arithmetic sum of the wind farm noise level as determined from the best-fit curve described in Guidance Note 2 of these Guidance Notes and any tonal penalty applied in accordance with Guidance Note 3. Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farms" (1997) published by the Energy Technology Support Unit (ETSU) for the Department of Trade and Industry (DTI).

#### Guidance Note 1

- (a) Values of the LA90, 10 minute noise statistic should be measured at the complainant's property, using a sound level meter of EN 60651/BS EN 60804 Type 1, or BS EN 61672 Class 1 quality (or the equivalent UK adopted standard in force at the time of the measurements) set to measure using the fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This should be calibrated in accordance with the procedure specified in BS 4142: 1997 (or the equivalent UK adopted standard in force at the time of the measurements). Measurements shall be undertaken in such a manner to enable a tonal penalty to be applied in accordance with Guidance Note 3.
- (b) The microphone should be mounted at 1.2 1.5 metres above ground level, fitted with a two-layer windshield or suitable equivalent approved in writing by the Local Planning Authority, and placed outside the complainant's dwelling. Measurements should be made in "free field" conditions. To achieve this, the microphone should be placed at least 3.5 metres away from the building facade or any reflecting surface except the ground at the approved measurement location. In the event that the consent of the complainant for access to his or her property to undertake compliance measurements is withheld, the Developer shall submit for the written approval of the Local Planning Authority details of the proposed alternative representative measurement location prior to the commencement of measurements and the measurements shall be undertaken at the approved alternative representative measurement location.
- (c) The L<sub>A90, 10 minute</sub> measurements should be synchronised with measurements of the 10-minute arithmetic mean wind and operational data logged in accordance with Guidance Note 1(d), including the power generation data from the turbine control systems of the wind farm.
- (d) To enable compliance with the conditions to be evaluated, the Developer shall continuously log arithmetic mean wind speed in metres per second and wind direction in degrees from north at hub height for each turbine and arithmetic mean power generated by each turbine, all in successive 10-minute periods. Unless an alternative procedure is previously agreed in writing with the Planning Authority, this hub height wind speed, averaged across all operating wind turbines, shall be used as the basis for the analysis. All 10 minute arithmetic average mean wind speed data measured at hub height shall be 'standardised' to a reference height of 10 metres as described in ETSU-R-97 at page 120 using a reference roughness length of 0.05 metres. It is this standardised 10 metre height wind speed data, which is correlated with the noise measurements determined as valid in accordance with Guidance Note 2, such correlation to be undertaken in the manner described in Guidance Note 2. All 10-minute periods shall commence on the hour and in 10- minute increments thereafter.
- (e) Data provided to the Local Planning Authority in accordance with the noise condition shall be provided in comma separated values in electronic format.

(f) A data logging rain gauge shall be installed in the course of the assessment of the levels of noise immissions. The gauge shall record over successive 10minute periods synchronised with the periods of data recorded in accordance with Note 1(d).

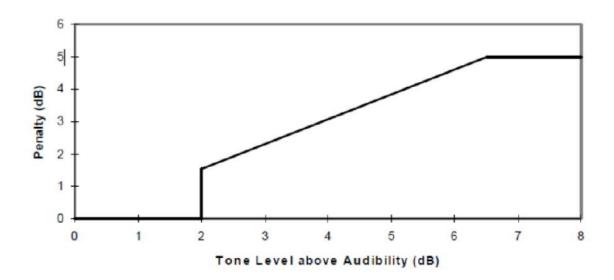
#### **Guidance Note 2**

- (a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Guidance Note 2 (b).
- (b) Valid data points are those measured in the conditions specified in the agreed written protocol under paragraph (d) of the noise condition, but excluding any periods of rainfall measured in the vicinity of the sound level meter. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10 minute period concurrent with the measurement periods set out in Guidance Note 1. In specifying such conditions the Local Planning Authority shall have regard to those conditions which prevailed during times when the complainant alleges there was disturbance due to noise or which are considered likely to result in a breach of the limits.
- (c) For those data points considered valid in accordance with Guidance Note 2(b), values of the LA90, 10 minute noise measurements and corresponding values of the 10- minute wind speed, as derived from the standardised ten metre height wind speed averaged across all operating wind turbines using the procedure specified in Guidance Note 1(d), shall be plotted on an XY chart with noise level on the Y-axis and the standardised mean wind speed on the X-axis. A least squares, "best fit" curve of an order deemed appropriate by the independent consultant (but which may not be higher than a fourth order) should be fitted to the data points and define the wind farm noise level at each integer speed.

#### **Guidance Note 3**

- (a) Where, in accordance with the approved assessment protocol under paragraph (d) of the noise condition, noise immissions at the location or locations where compliance measurements are being undertaken contain or are likely to contain a tonal component, a tonal penalty is to be calculated and applied using the following rating procedure.
- (b) For each 10 minute interval for which LA90, 10 minute data have been determined as valid in accordance with Guidance Note 2 a tonal assessment shall be performed on noise immissions during 2 minutes of each 10 minute period. The 2 minute periods should be spaced at 10 minute intervals provided that uninterrupted uncorrupted data are available ("the standard procedure"). Where uncorrupted data are not available, the first available uninterrupted clean 2 minute period out of the affected overall 10 minute period shall be selected. Any such deviations from the standard procedure, as described in Section 2.1 on pages 104-109 of ETSU-R-97, shall be reported.
- (c) For each of the 2 minute samples the tone level above or below audibility shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104109 of ETSU-R-97.

- (d) The tone level above audibility shall be plotted against wind speed for each of the 2 minute samples. Samples for which the tones were below the audibility criterion or notone was identified, a value of zero audibility shall be used.
- (e) A least squares "best fit" linear regression line shall then be performed to establish the average tone level above audibility for each integer wind speed derived from the value of the "best fit" line at each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic mean shall be used. This process shall be repeated for each integer wind speed for which there is an assessment of overall levels in Guidance Note 2.
- (f) The tonal penalty is derived from the margin above audibility of the tone according to the figure below.



#### **Guidance Note 4**

- (a) If a tonal penalty is to be applied in accordance with Guidance Note 3 the rating level of the turbine noise at each wind speed is the arithmetic sum of the measured noise level as determined from the best fit curve described in Guidance Note 2 and the penalty for tonal noise as derived in accordance with Guidance Note 3 at each integer wind speed within the range specified by the Local Planning Authority in its written protocol under paragraph (d) of the noise condition.
- (b) If no tonal penalty is to be applied then the rating level of the turbine noise at each wind speed is equal to the measured noise level as determined from the best fit curve described in Guidance Note 2.
- (c) In the event that the rating level is above the limit(s) set out in the Tables attached to the noise conditions or the noise limits for a complainant's dwelling approved in accordance with paragraph (e) of the noise condition, the independent consultant shall undertake a further assessment of the rating level to correct for background noise so that the rating level relates to wind turbine noise immission only.

- (d) The Developer shall ensure that all the wind turbines in the Development are turned off for such period as the independent consultant requires to undertake the further assessment. The further assessment shall be undertaken in accordance with the following steps:
  - I. Repeating the steps in Guidance Note 2, with the wind farm switched off, and determining the background noise (L3) at each integer wind speed within the range requested by the Local Planning Authority in its written request under paragraph (c) and the approved protocol under paragraph (d) of the noise condition.
  - II. The wind farm noise (L1) at this speed shall then be calculated as follows where L2 is the measured level with turbines running but without the addition of any tonal penalty:

$$L_1 = 10\log\left[10^{L_2/10} - 10^{L_3/10}\right]$$

- III. The rating level shall be re-calculated by adding arithmetically the tonal penalty (if any is applied in accordance with Note 3) to the derived wind farm noise L1 at that integer wind speed.
- IV. If the rating level after adjustment for background noise contribution and adjustment for tonal penalty (if required in accordance with note 3 above) at any integer wind speed lies at or below the values set out in the Tables attached to the conditions or at or below the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then no further action is necessary. If the rating level at any integer wind speed exceeds the values set out in the Tables attached to the conditions or the noise limits approved by the Local Planning Authority for a complainant's dwelling in accordance with paragraph (e) of the noise condition then the Development fails to comply with the conditions.

#### **Definitions**

In this consent and deemed planning permission:-

- "Commencement of the Development" means the date on which Development shall be taken as begun in accordance with section 27 of the Town and Country Planning (Scotland) Act 1997 (as amended).
- "the Company" means Hagshaw Hill Repowering having its registered office at I A Stewart & Co, The Mechanics Workshop, New Lanark, Lanark, ML11 9DB, Company No. SC603085, or such other person who from time to time may lawfully have the benefit of this consent.
- "Date of First Commissioning" means the date on which electricity is first exported to the grid network on a commercial basis from any of the wind turbines forming part of the Development.
- "Date of Final Commissioning" means the earlier of (i) the date on which electricity is exported to the grid on a commercial basis from the last of the wind turbines forming part of the Development erected in accordance with this consent; or (ii) the date falling twenty-four months from the Date of First Commissioning.
- "the Development" means the development as described in Annex 1 authorised by the section 36 consent and deemed planning permission.
- "HES" means Historic Environment Scotland.
- "Planning Authority" means South Lanarkshire Council.
- "SEPA" means Scottish Environmental Protection Agency.
- "Site" means the area of land outlined in red on figure 1.2a, 1.2b, 1.2c site layout plan of the Environmental Impact Assessment report and Annex 3 of this decision letter.
- "SNH" means Scottish Natural Heritage.
- "storage technology" means the electricity storage technology type that is used by the Development.